

WHAT IS CLAIMED IS:

1. A medical lancet, comprising:

a first ascending region, a descending region, and a second ascending region subsequently and integrally formed of biodegradable material, extending from a point in a predetermined direction, each of said regions having triangular cross sections taken along any planes perpendicular to the predetermined direction;

said first and second ascending regions having the triangular cross sections of which area monotonically increases as being away from the point; and

said descending region having the triangular cross sections of which area monotonically decreases as being away from the point;

wherein said first and second ascending regions have the largest cross section having substantially the same size and shape to each other.

2. The medical lancet according to Claim 1, further comprising:

at least one additional descending and ascending regions subsequently and integrally formed of biodegradable material and connected to said second ascending region, extending in the predetermined direction;

wherein each of said additional descending and

ascending regions has the triangular cross sections taken along any planes perpendicular to the predetermined direction, of which area monotonically increases and decreases as being away from the point, respectively; and

5 wherein said first and second ascending regions have the largest cross section having substantially the same size and shape to each other.

3. The medical lancet according to Claim 1,

10 wherein the smallest cross section in the descending region is similar to the largest cross section in the ascending regions, and

 wherein the smallest cross section in the descending region has the area greater than one-fourth of the area of
15 the largest cross section in the ascending regions.

4. The medical lancet according to Claim 3,

 wherein the smallest cross section in the descending region has the area greater than four-ninths of the area of
20 the largest cross section in the ascending regions.

5. The medical lancet according to Claim 1,

 wherein the largest cross sections in said first and second ascending regions are spaced away from each other by
25 a gap greater than one micron.

6. The medical lancet according to Claim 1,

wherein a continuous curved portion is provided between said descending region and said second ascending
5 region for smoothly connecting thereof.

7. The medical lancet according to Claim 1, further comprising:

a constant region integrally formed of biodegradable
10 material between said descending region and said second ascending region, having triangular cross sections taken along any planes perpendicular to the predetermined direction, of which area is constant.

15 8. The medical lancet according to Claim 1,

wherein the area of the triangular cross sections in the first and second ascending regions are linearly increased at first and second increasing rates, respectively, and the first increasing rate falling within
20 a range between one-sixteenth and one of the second increasing rate.

9. The medical lancet according to Claim 8,

wherein the first increasing rate is one-ninth of the
25 second increasing rate.

10. The medical lancet according to Claim 1, further comprising:

5 a holding region of biodegradable material connected to said second ascending region.

11. The medical lancet according to Claim 1, further comprising:

10 at least one channel extending in the predetermined direction through at least one of said first and second ascending regions and descending region.

12. The medical lancet according to Claim 11,

15 wherein said holding region has at least one chamber in communication with said channel.

13. The medical lancet according to Claim 12,

wherein said channel has at least one opening.

20 14. The medical lancet according to Claim 11,

wherein said channel has at least two openings spaced away from each other by a predetermined gap.

15. The medical lancet according to Claim 11,

25 wherein a plurality of said channels are provided, and

wherein said holding region has a plurality of said chambers, each of the chambers being in communication with corresponding one of said channels.

5 16. The medical lancet according to Claim 1, further comprising:

at least one groove extending in the predetermined direction through at least one of said first and second ascending regions and descending region.

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17. The medical lancet according to Claim 1, further comprising:

a plurality of vertical cavities extending in a vertical direction perpendicular to the predetermined
15 direction; and

a seal membrane of biodegradable material for sealing said vertical cavities;

wherein the seal membrane has the thickness in the vertical direction varying based upon the position of each
20 of the vertical cavities.

18. A medical lancet, comprising:

a first ascending region, a descending region, and a second ascending region subsequently and integrally formed
25 of biodegradable material, extending from a point in a

predetermined direction, each of said regions having trapezoidal cross sections taken along any planes perpendicular to the predetermined direction;

5 said first and second ascending regions having the trapezoidal cross sections of which base monotonically increases as being away from the point; and

 said descending region having the trapezoidal cross sections of which base monotonically decreases as being away from the point;

10 wherein said first and second ascending regions have the largest cross section having substantially the same size and shape to each other.

19. The medical lancet according to Claim 18, further comprising:

15 at least one additional descending and ascending regions subsequently and integrally formed of biodegradable material and connected to said second ascending region, extending in the predetermined direction;

20 wherein each of said additional descending and ascending regions has the trapezoidal cross sections taken along any planes perpendicular to the predetermined direction, of which base monotonically increases and decreases as being away from the point, respectively; and

25 wherein said first and second ascending regions have

the largest cross section having substantially the same size and shape to each other.

20. The medical lancet according to Claim 18,

5 wherein the smallest cross section in the descending region has the base greater than a half of the base of the largest cross section in the ascending regions.

21. The medical lancet according to Claim 20,

10 wherein the smallest cross section in the descending region has the base greater than two-thirds of the base of the largest cross section in the ascending regions.

22. The medical lancet according to Claim 18,

15 wherein the largest cross sections in said first and second ascending regions are spaced away from each other by a gap greater than one micron.

23. The medical lancet according to Claim 18, further
20 comprising:

 a constant region integrally formed of biodegradable material between said descending region and said second ascending region, having trapezoidal cross sections taken along any planes perpendicular to the predetermined
25 direction, of which base is constant.

24. The medical lancet according to Claim 18,

wherein the base of the trapezoidal cross sections in the first and second ascending regions are linearly increased at first and second increasing rates, respectively, and the first increasing rate falling within a range between one-fourth and one of the second increasing rate.

25. The medical lancet according to Claim 24,

wherein the first increasing rate is one-third of the second increasing rate.

26. The medical lancet according to Claim 18, further

comprising:

a holding region of biodegradable material connected to said second ascending region.